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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,367	04/19/2004	Satoshi Aoyama	119491	1038
25944 7590 12/07/2007 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
			EXAMINER WANG, EUGENIA	
			ART UNIT 1795	PAPER NUMBER
			MAIL DATE 12/07/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/826,367

Applicant(s)

AOYAMA ET AL.

Examiner

Eugenia Wang

Art Unit

1795

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 27 November 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

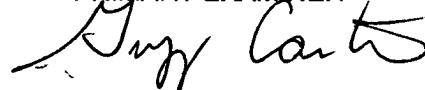
**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

GREGG CANTELMO  
PRIMARY EXAMINER



Continuation of 11. does NOT place the application in condition for allowance because: Applicant argues that Aoyama et al. does not teach all of the structural features of claim 1, namely a stop signal input module and a stop control module (functional language omitted). These modules function in various ways to supply hydrogen and purge hydrogen from the fuel cell.

Examiner respectfully disagrees. This structure is taught by Aoyama et al. (see fig. 1). There is a hydrogen line to the inlet [71] and a pump [74] that controls the operation of the hydrogen line, which is connected to the control unit [10]. This system is connected in the same manner as that of the instant application (where the control unit functions as the stop signal input module and stop control module). Therefore, Examiner's position is that since the structure of Aoyama and the instant application are the same, then Aoyama et al. is capable of functioning in the same manner. For clarity's sake, Examiner will reiterate the office's position on "capable of" for apparatus cases.

It has been held that the recitation of an element is "capable" of performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchinson, 69 USPQ 138. While intended use recitations and other types of functional language cannot be entirely disregarded. However, in apparatus, article, and composition claims, intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 938, 136 USPQ 458, 459 (CCPA 1963). Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). See also MPEP § 2114. The manner of operating the device does not differentiate an apparatus claim from the prior art. A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).

Applicant argues that the previous Office Action does not identify the structural features disclosed in Aoyama that correspond to every structural feature positively recited in claim 1, namely the stop signal input module and stop control module. Applicant further focuses on the hydrogen generating devices that was discussed in the Office Action and argues that there is insufficient support that the device is capable of operating in the same manner.

Examiner respectfully disagrees. In addition to the hydrogen generating device, Examiner also noted the connection of such a device to the control unit [10]. The control unit serves as the stop signal input module and stop control module. Furthermore, the connection of the control unit to the hydrogen line as shown in fig. 1 is pointed out. The connections have the controller controlling the hydrogen flow and thus is capable of operating in the same manner. Applicant has not provided any proof as to how the structure of Aoyama et al. is different than that of the instant application, and thus the previous position is upheld.

Applicant comments about page 3 of the previous office action and how it mischaracterizes Applicants' claim language and how the claim language does not characterize capabilities.

Examiner respectfully disagrees with Applicant's statement. Applicant's claim does have functional language. One non-limit example is provided: "a stop control module that selects a hydrogen purge mode ... or a hydrogen no-purge mode ..." The selection of a hydrogen purge mode or a hydrogen no-purge mode are actions and thus are functions of the stop control mode. Therefore a control module connected in the same manner as Applicant's would be structurally the same, and thus the two would be patentable indistinct.

Applicant argues that the Office Action convolutes the standard for establishing anticipation.

Examiner respectfully disagrees. The precedent set forth is the Office's position on how to deal with apparatus claims that structurally the same but differ by function. Accordingly, without a showing by Applicant that the prior art and the instant application differ by structure, anticipation is upheld.

Applicant argues that the Office Action fails to identify the structural elements of the stop signal input module and stop control module, pointing to the pump [74].

Examiner respectfully disagrees with Applicant's statement. The previous office action does not merely disclose that the pump [74] functions by itself. It is used in conjunction with the control unit [10], which would serve as the stop signal input module and stop control module. Applicant has shown why the controller does not and is not capable of functioning as the stop signal and stop control module. Thus, Examiner upholds the previous position that the prior art structure and the instant application structure are the same.

With respect to the Meyer et al. in view of Epp et al., Applicant argues that because Epp et al. does not teach a purge gas supply module, it cannot teach the recited stop control module that activates and controls the purge gas supply module.

Examiner would like to point out that Epp et al., in this rejection, is not being relied upon to teach the stop control module that activates and control the purge gas supply module. It is being relied upon to obviate the use of a hydrogen separation module.

Applicant argues that the combination of Meyer et al. and Epp et al. is improper because it (1) convolutes the standards and (2) fails to identify the structural elements of the stop signal input module and the stop control module.

Examiner respectfully disagrees. The response to similar arguments with regards to Aoyama et al. have been set forth above and apply to this situation as well. For clarity's sake, the position will be reiterated herein. With respect to (1), the precedent set forth is the Office's position on how to deal with apparatus claims that structurally the same but differ by function. With respect to (2), Examiner mentions the inherency of a controller existing, wherein the controller acts as the stop signal input module and the stop control module.

Applicant argues that the inherency relied upon is not properly set forth.

Examiner respectfully disagrees. The evidence is provided within the office action and is reiterated herein for clarity's sake:

"Although a stop input module and stop control module is not specifically mentioned in Meyer et al.'s system, one inherently exist. This is exemplified by the fact that it talks about a shutdown system and the controlling of a switch [132], valves [141, 152, 154, 156], and blowers [116B, 116C]. In further accordance with Meyer et al.'s shutdown process, diverter valves [140, 149] are opened, which results in purging both sides of both sides of the fuel cell as well as the fuel processing system [104] of residual hydrogen and carbon monoxide (para 0025; para 0026, lines 1-4)." (p 12)

The shutdown and the controls corresponding to the shutdown are the evidence as to the fact that a control system (stop signal input module and stop control module) exists. Furthermore, it has been set forth that time lag between a signal and a function is inherent, even if the time lag is small. Applicant has not shown that there is not time lag between a stopping and shutdown mode. For these reasons, the previous rejection is upheld.

Applicant points to the fact that the stop signal input module and stop control module is not necessarily present.

Examiner respectfully disagrees. This position is supported in the response to the previous argument as to the inherency of a control system, wherein the control system is the stop signal input module and stop control module.

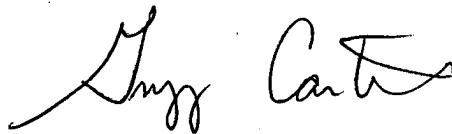
Applicant argues that the combination of Meyer et al. and Epp et al. may not be proper because the combination may impermissibly change the principles of operation of the Meyer device.

Examiner respectfully disagrees and would like to point to Applicant's remarks in the last paragraph of page 4. It seems as if Applicant has misread what Epp et al. is used teach. As previously stated, Epp et al. is not being relied upon to teach the stop control module that activates and control the purge gas supply module. It is being relied upon to obviate the use of a hydrogen separation module. Furthermore, Applicant only notes that the combination "may" change the principles, without a clear showing that it definitely does. For those reasons, the combination is viewed as proper and upheld.

Applicant then again reiterates that the previous office action misapplies the use of "capable of" and inherency.

Examiner, however, has responded to all of the arguments in full above. Accordingly, the rejections of record are upheld.

It is noted that with respect to the arguments regarding the 103 rejections, wherein Applicant does not argue how the combination is not proper, the Examiner maintains the obviousness rejections and upholds the rejection of the primary reference..



GREGG CANELMO  
PRIMARY EXAMINER